

PHILADELPHIA MEDICAL TIMES.

SATURDAY, JUNE 21, 1873.

ORIGINAL LECTURES.

CLINICAL REMARKS ON THE DIAGNOSIS OF APOPLEXY.

BY DR. H. C. WOOD, JR.,

Lecturer on Diseases of the Nervous System in the University of Pennsylvania.

GENTLEMEN:—Among the *οἱ πολλοί* the diagnosis of apoplexy is considered a very simple matter, but, in reality, to determine whether a patient is or is not suffering from cerebral hemorrhage is often a difficult, nay, an impossible, task. As an instance of an ordinary case of apoplexy, the following is related:

R. P., aged 65, on September 5, 1871, an hour or so after a heavy dinner, heard of his having received a government appointment for which he had been very anxious. At 6½ P.M. he took a cup of tea at a friend's, after which he returned to his lodgings; and at 7.30 P.M. persons passing by on the opposite side of the way were startled by a man at the window calling "Murder! help!" The persons in the house had previously heard pounding in the room, but thought nothing of it, as Mr. P. had been in the habit of stamping documents or letters there. On going up-stairs, Mr. P. was found lying on the floor in a semi-unconscious state, but, on being aroused, he stated that some one had hit him violently on the right side of the head. Dr. Adler, being called, found him, at 7.45, perfectly unconscious, with right pupil dilated; left contracted; the right leg in a state of exceedingly rapid vibration; convulsions; stertor; face not drawn; skin pale and cool. These symptoms persisted, except the convulsions, which soon passed off, and the man died about 11.30.

Autopsy.—Kidneys decidedly granular; brain, an enormous clot breaking down all of the centre of the right posterior lobe, and also the septum between the two hemispheres; it evidently first started in posterior cornu of the right ventricle.

In this, as in most other cases of cerebral hemorrhage, the prominent symptoms were disturbance of consciousness and unilateral disturbance of motility. Neither of these symptoms is, however, constantly apparent.

Thus, in apoplexy, a small clot may affect motility without causing loss of consciousness, or the whole body may be so relaxed and quiet that no difference can be perceived in the two sides.

When to these facts is added the circumstance that loss of consciousness may occur, and even be accompanied by unilateral paralysis, without cerebral hemorrhage, it is very apparent that the diagnosis of the latter lesion is often attended with great difficulty.

My own experience has been that this difficulty is even greater than the facts above narrated would indicate; for I have seen large cerebral hemorrhage occur without either immediate loss of consciousness or disturbance of motility. The following case is offered as proof of this assertion:

William Wilson, aged 70, came into the wards of the Philadelphia Hospital, October 14, 1872. The day

after he came in, he seemed sleepy and stupid, but gave a perfectly rational account of himself, complaining only of pain in his stomach, and of vomiting after eating. There was a distinct systolic apex-murmur, and there were also sonorous râles in both lungs. He went about the wards freely, and nothing was discovered pointing towards the existence of nervous disease until November 1, when I noticed a decided paresis of the left leg, which, according to the testimony of the nurse, had gradually developed during the previous week, at first showing itself by a faint limp or halt in his gait. In the arm there were only the slightest traces of defective nerve-power; in the face none. The pupils were normal; the intellect was evidently affected, dulness and drowsiness having come on during the last few days. His symptoms now rapidly increased. There was no headache, but the drowsiness deepened into stupor, the paresis into paralysis, which by the 6th of November affected the face, and on November 9 he died, after having been comatose for some time.

The following is a record of his temperature as taken simultaneously in the two axillæ:

Nov. 3, 12 M.,	Right axilla 102°	Left axilla 102°
" " 6 P.M.,	" 100°	" 101°
" " 4, 6 A.M.,	" 99½°	" 99°
" " 6 P.M.,	" 100°	" 99°
" " 5, 7 A.M.,	" 101°	" 103°
" " 5½ P.M.,	" 99°	" 98°
" " 6, 6 A.M.,	" 98°	" 98°
" " 6 P.M.,	" 99°	" 99°
" " 7, 6 A.M.,	" 100°	" 101°
" " 5½ P.M.,	" 100½°	" 101°
" " 8, 6 A.M.,	" 99°	" 100°
" " 4 P.M.,	" 103½°	" 104°

Autopsy, November 10.—Occupying the extreme anterior cornu of the right cerebral hemisphere was a clot the size of a walnut, certainly of some considerable age; yellowish in the centre. The whole right anterior lobe was involved in secondary softening.

Such a case as this, gentlemen, is an exceedingly rare one. In all probability, the rupture of the blood-vessel which caused the hemorrhage occurred some time during sleep; else there would have been some moment of unconsciousness, or some instantaneous sense of shock in the brain. Granting that the clot was formed during sleep, the case becomes parallel with one described by Abercrombie, in which a lady fifty-six years of age, and enjoying good health, was suddenly seized with violent pain in the head, and giddiness, and soon after lost her consciousness for a moment or two. No paralytic symptoms occurred for two weeks, when she had a distinct second attack of apoplexy, and died.

I think these facts are enough to convince you, without further illustration, of the difficulty that may attend the diagnosis of cerebral hemorrhage. The affections with which it is most likely to be confounded are, cerebral thrombosis, simple apoplexy, poisoning from alcohol or opium, and uræmia.

The following case will show you that thrombosis may put on the exact features of apoplexy. I do not think that the diagnosis is of practical importance; for in a case of thrombosis but one end can occur, and, whether you bleed or stimulate, the result will only be that for which the doctor is never blamed in apoplexy,—namely, death.

Jane F., colored, 65 years old, was suddenly seized on August 13, 1872, with a convulsion, whilst in the ward of the Philadelphia Hospital. She remained unconscious for about fifteen minutes, and when she awoke had marked left-sided hemiplegia, in which the face participated. The next day she could only move the fingers and toes very slightly; her mental condition was very dull, and she had an aphasia which was apparently ataxic.

On the 19th of August she died. At the autopsy a firm white clot was found in the right middle cerebral artery, with softening of the anterior lobe.

The term simple apoplexy is applied to those rare cases in which death occurs with all the symptoms of cerebral hemorrhage, and yet on post-mortem examination no lesion is found. To distinguish these cases during life from true apoplexy is simply impossible, and I do not propose to enter at all upon their discussion to-day.

The important practical difficulties in apoplexy arise in regard, especially, to poisoning and to uræmia.

The two poisonings which, from their resemblance to apoplexy and from their frequent occurrence, are most apt to be confounded with it, are those induced by alcohol and by opium.

It may be laid down as a practical aphorism that there is no symptom which will justify a physician, when called to a man who has been found insensible, in pronouncing positively that the case is one of drunkenness. Mistakes have very frequently been made, and men have been left to "sleep it out," who have slept on into the sleep that knows no waking. Further, apoplexy may come on during a condition of drunkenness, and its onset be unnoted until death unexpectedly results or the patient wakes up hemiplegic.

Thus, Dr. Hughlings Jackson mentions a case in which the alcohol impregnated not only the breath, but the urine also, and in which the patient was left to sleep it off. After death a clot was found covering nearly the whole of one hemisphere.

The following case also illustrates this point:

Bridget K., æt. 20, intemperate, came into the wards of the Philadelphia Hospital, April 13, 1872, suffering from paralysis of right face, arm, and leg. The paralysis was complete in arm and leg, with great relaxation and no contraction of muscles; that of the right side of the face, however, though very marked, was not absolute; the forehead was smooth, but there was no interference with closure of eye. Articulation was very imperfect.

For four or five days after admission, on being asked any question, the patient would assume a troubled expression as if of "trying to think," and would invariably preface her answer with, "You may say—" Her statements, at intervals of a few minutes, were discrepant. If taxed with telling an untruth, she would laugh, and seemed to delight in puzzling or misleading her interrogator.

Her mother says that the patient had been indulging very freely in liquor; that she was put to bed drunk on the night of April 8, and the next morning on awakening was paralyzed as at present.

This woman remained in the hospital until July 18, 1872, when she left the wards. At that time the leg had so improved that she could walk by means of a cane, but the arm was powerless, and the flexors of the

fore-arm were very much contracted. After leaving the institution she resumed her habits of drinking, and late in October returned to the wards. Directly after this she died suddenly of œdema of the lung.

At the autopsy the remains of a clot were found in the left corpus striatum. The kidneys were granular.

When a patient is first seen during the advanced stage of opium-poisoning, the resemblance to apoplexy may be just as close and the diagnosis just as uncertain as in alcoholic poisoning. The following case will serve to illustrate this, as it was one in which the diagnosis of opium-poisoning was during life considered as warranted by the facts of the case, but was abandoned after death on account of the lesions found, although, as seems to me at present, the case was very probably one of such character. Before stating my reasons for coming to the latter conclusion, let me relate the circumstances.

Bridget —; æt. 47; Irish; entered the Philadelphia Hospital with acute rheumatism. Late in the evening of November 29 she received, according to orders, thirty drops of the deodorized tincture of opium. On the morning of the 30th Dr. Potter was called, and found her unconscious, with stertorous breathing and contracted pupils. The pulse could just be counted. I saw her first at 8.25 A.M. She could then be roused sufficiently to say a word or two, but immediately relapsed into deep unconsciousness. Respiration 18 per minute. The pulse was so feeble that it could not be counted, but was beating over 150 a minute, and barely perceptible. Ordered $\frac{1}{2}$ ij whisky, atropia sulph. gr. $\frac{1}{4}$ hypodermically. The battery was also brought into requisition.

9 A.M.—No improvement.

9.10.—Placed her in a bath at 117° Fahr., and applied the cold douche to her head and chest.

9.15.—Respiration deeper. Pupils slightly relaxed. Atropia sulph. $\frac{1}{8}$ grain injected.

9.25.—Pulse somewhat stronger.

9.40.—Put her in a bath at 120° Fahr. for 1½ minutes, using the cold douche as before.

9.45.—Pulse unchanged. Pupils dilated to nearly natural size.

10.—Skin moist; breathing somewhat easier. Pupils well dilated.

10.50.—The heart's action is evidently growing weaker. Its beat, as counted on auscultation, 140. After this about half a drachm of strong liquor ammonia was injected into a vein in the arm, without any apparent effect, and she died of failure of the heart's action at 2.30 P.M.

At the autopsy nothing abnormal was found, excepting a firm white thrombus occupying the anterior and middle cerebral arteries on each side, and extending a short distance into the carotids. The anterior lobes were, of course, very anæmic. The heart contained firm fibrinous coagula.

In deciding as to the cause of death in this case, it is evident that the first point to be determined is whether the thrombi in the cerebral arteries were the cause of the attack, or whether they were developed during the long, intense depression of the circulation which preceded death. Let me call your attention, then, to the fact that they were not embolic in nature, as there was no diseased valve or similar depot to furnish the material to plug up the arteries. What should cause a thrombus to form in a young, healthy woman? On the very

face of it, the idea that those thrombi were spontaneous, occurring before the failure of circulation, is an improbable one. Further notice that both sides are symmetrically affected, that in each the anterior and middle cerebral and even the carotid arteries are affected. It is simply inconceivable that a thrombus should form in such manner in a woman of the patient's age, or indeed of any age, whilst the circulation was at all active. I think it may be laid down as a law that thrombi forming in a cerebral vessel are due to a disease of the coats of that vessel. There is no marked disease of the walls of this woman's arteries. The symmetrical character of the coagula, and their extensiveness, show that they are due not to local but to general causes. Look at the heart: its cavities are filled with coagula as white, as fibrinous, as those in the vessels. Would any one maintain that the heart-clot was not formed during the long hours of almost suspended cardiac action that preceded death? Evidently the cerebral thrombi were of the same nature as the cardiac, their origin during the same period, and from the same causes. In regard to the amount of laudanum administered, the statements of the nurse must be taken *cum grano salis*. She may speak the truth; she may have made a mistake without knowing it herself; she may be purposely concealing her handiwork. Who can tell? The case seems to me to have been one of opium-poisoning, because the symptoms are in accord with such view, whilst at the post-mortem nothing to account for the fatal result was, in my opinion, discovered. Notice, I pray you, however, that I say *seems*, for the diagnosis is by no means a certain one: there is no absolute proof that the woman died of poisoning.

The facts being as they are, the diagnosis of apoplexy being in some instances at once so difficult and so important, it behooves us to consider closely what are the points to be looked at when called to such a case. As the patient lies before you unconscious, you should first test the extent and amount of that unconsciousness by shouting in his ear, shaking him, etc., and should note whether he can or cannot be roused out of it. Then the existence of local paralysis should be looked for. If it be found, it demonstrates that the case is not one of poisoning. Remember, however, on the other hand, that your inability to find the local paralysis by no means proves the absence of a cerebral clot.

There are two sets of apoplectic cases in which you may not be able to perceive any difference in the two sides,—the one where, as in the case narrated earlier in my lecture, there is an enormous clot oppressing the whole brain; the other where the clot is small but lies near the centre of the pons varolii, and consequently affects both sides of the body equally. It is plain that in the first case you will have the most profound unconsciousness; in the latter the unconsciousness may be much less marked, so that the patient can be aroused. Unless in the very last stages of opium and alcoholic poisoning, the patient can by loud shouting and severe shaking be aroused; so that you can distinguish the apoplexy of the profounder type with a certain amount of probability by the

mere absence of capability of being aroused. Moreover, an examination of the pupils in this form of apoplexy will often reveal a decided inequality. As such inequality is hardly conceivable in poisoning, its importance is at once manifest. If there be a history of sudden attack, an unconsciousness complete, an inequality of pupils, the attack is almost certainly apoplexy, of some form,—probably due to a large cerebral hemorrhage. In hemorrhage into the pons, convulsions are almost invariably present; and, as their occurrence is very rare in poisoning from alcohol or opium, they are of diagnostic significance.

By attending to these points you will almost always be able to make a probable diagnosis. But, gentlemen, do not be too positive or outspoken in your assertions to the friends of the sufferer. Especially is it incumbent on you to hold your peace if you suspect poisoning.

In regard to the development of apoplexy during drunkenness, you should be led to suspect it when there is a sudden deepening of the unconsciousness into complete coma and a sudden development of stertorous breathing, especially if this change of symptoms occur after a fall or a blow upon the head. Remember, however, that unless in very marked cases the diagnosis is rather a matter of suspicion than of scientific deduction.

In regard to uræmia, in most cases the confounding of it with apoplexy is inexcusable; and yet it is sometimes unavoidable. I have seen one case in which I made the diagnosis of cerebral hemorrhage on account of the sudden development of unconsciousness with a perfectly marked hemiplegia, but in which an autopsy showed that there was no brain-lesion,—simply advanced contracted kidneys. You may call the case simple apoplexy, but I cannot help believing that the origin of the symptoms was the same as that of the more ordinary manifestations of uræmia.

Generally in uræmia the gradual onset of the drowsiness, the state of semi-coma out of which the patient can be momentarily aroused, the absence of paralysis, and the presence of convulsions, make the diagnosis easy enough.

ORIGINAL COMMUNICATIONS.

GLEANINGS FROM HOSPITAL PRACTICE— GUNSHOT WOUNDS OF THE HEAD.

BY H. E. WOODBURY, M.D.

DURING my service as a member of the medical staff of Armory Square General Hospital in 1864 and 1865, I met with many novel and interesting cases of gunshot wounds. It has been my purpose to publish a brief history of some of these, but other demands upon my time have prevented me from so doing. As our hospital was located only a few blocks from the steamboat wharf, we received a majority of the worst cases.

Case I.—In 1864, Major H., of a New York regi-

ment, was brought into my ward wounded. A bullet from a carbine or navy revolver struck the dorsum of the nose at a point about one inch below its summit and passed into the head and brain. I did not deem it expedient to probe this wound to any great extent, but satisfied myself, by passing a silver sound for about two inches into the opening (which was very small), that no spiculæ were present. At least I could detect none. I applied a cold-water dressing, ordered "special diet," and pursued the expectant plan. After a few days there was a somewhat offensive discharge from the nostrils, for which antiseptic injections were used. The patient was a man of great determination and of strong constitution. In a few weeks his wound healed, and he desired to walk about the ward. On making the attempt, he found that he could not stand without assistance, and, even when supported, he had lost the power of locomotion to such an extent that he could not take one step. This was the interesting phase in his case.

I at once ordered strychnia with dilute phosphoric acid, and directed him to renew his attempts to walk daily. In about one week he had so far recovered the use of his limbs that, by taking hold of the wire by which the musquito-nets were suspended, he could shuffle himself across the ward. From this time he continued to improve, until at length he had gone through the process of learning to walk, if so I may express it.

He left for his home, on furlough, after having been a patient about two months, and on his return, sixty days after, he had gained so much that I did not recognize him. "Doctor, you do not remember me," he said, pointing to a very small scar on his nose,—when I at once called him by name. He then informed me that his wound had caused him no trouble during his absence, that his health had never been better, and that he was on his way to duty, "to take another chance at them." I have never seen him since.

In this case, I have no doubt, the ball penetrated and was lodged in the cerebellum, causing, by the irritation it produced, temporary paralysis of that portion of the brain. During the entire course of treatment there were no other indications of cerebral derangement,—no delirium—and very little, if any, febrile excitement.

Case II.—Private B., admitted from the army of the Potomac, in September, 1864. A fragment of shell struck him on the forehead, cutting away a portion of the cranium (frontal bone), and leaving the brain exposed and lacerated. The wound was nearly oval in shape, and included the upper third of the forehead, extending backward nearly to the coronal suture. When brought in, he was in a comatose condition, from which he never rallied. Cold-water dressings were applied, and frequently changed. On the third or fourth day after admission, while the dresser was changing the lint, a fearful hemorrhage ensued. He at once called me, and I took up the meningeal artery and ligated it. I reported the fact to the surgeon in charge. "It will do no good, doctor," he replied, "for sloughing will take place, and your man will die from

hemorrhage." His prediction was not verified, as the patient lived forty-eight hours, and then died without having lost another drop of blood,—probably from nervous exhaustion.

Case III.—Private G., admitted November, 1864, from the army of the Potomac, with gunshot wound of the head. A minie-ball struck the frontal bone at a point about one and a half inches in front of the coronal suture, and an inch to the left of the median line, cutting a neat furrow from two to three inches in length, and leaving the brain exposed. Cold-water dressings were ordered, with light nourishing diet, and perfect quiet. In a few days profuse fungous granulations made their appearance in the wound. These I clipped off with the scissors, and touched the parts from which they sprang with nitrate of silver. A healthy action speedily followed, and after a sojourn of six weeks in the hospital the patient left, apparently as well as ever, for a visit to his home.

My experience and observation in the service convince me that, as a general rule, the probing of gunshot wounds of the head is inadmissible. In short, in all cases of gunshot wounds, the less we use the probe the better. In 1863 I saw in Seminary Hospital, Georgetown, a German who had received a ball (probably a round one from a smooth-bore) in the temporal region just in front of the ear. Two medical officers were present with me at the time. We each in turn examined the wound with the little finger. This was passed in its entire length. No probe or sound was used. The water dressings were applied, and in thirty days, to our surprise, the man was fit for duty. I have no doubt a moderate amount of probing would have produced a very different result in this case.

WASHINGTON, D.C., June 9, 1873.

THE DOSE OF CARBOLIC ACID.

BY DR. W. G. COTTON,

East Bethlehem, Washington Co., Pa.

THE following case is of interest, as showing that we may yet be unacquainted with what should be the proper dose of carbolic acid in some instances. Mrs. Moffitt, aged 70, was suffering from diarrhoea, for the relief of which she requested her husband to pour out twenty-four drops of laudanum. He by mistake gave her that amount of crude carbolic acid. It "burnt" the mucous membrane of the mouth and throat considerably, and produced a moderate amount of nervous prostration, which did not last long. She at once was aware there had been a mistake made, but thought the drug taken was "pain-killer." In about an hour afterwards the discovery was made that carbolic acid had been taken, and milk was then freely used as an antidote. The evil which resulted was immediate, but immaterial, and the good accomplished was the relief of the diarrhoea. I would not recommend twenty-four drops as a proper dose of this fluid, but have an idea that one drop is rather homœopathic.

TRANSLATIONS.

HYPNOTISM OR BRAIDISM IN ANIMALS.

An abstract of two Lectures delivered by Prof. JOH. CZERMAK in the private Physiological Laboratory of the University of Leipsic and published in *Die Gartenlaube*, Hefte 2-3, 1873.

BY DR. WILLIAM ASHBRIDGE.

THE subject of the two lectures of which this article is an abstract is one that is of interest in two respects. The physiological appearances of which descriptions are given, and which are demonstrated upon animals of various sorts, considered by themselves are in the highest degree surprising and wonderful; and, on the other hand, they show how readily men, even when of fair education and good abilities, fall into error in the deductions which they draw from their observation of natural phenomena, if they are lacking in that special scientific training which alone can render them capable.

The want of discrimination and the prejudice of such observers are astonishing, and prove how little weight the scientific investigator dares give their statements. The witness certainly was present and heard and saw all that occurred, yet still what he asserts must not be accepted as accurate, although no doubts of his veracity are entertained. This apparent paradox is explained by the fact that such observers cannot judge between mere co-existence or sequence in time and the relation of cause and effect: they make the frequently-committed error of substituting "propter" for "post hoc," and thus draw a worthless inference.

The best designation for occurrences of this character is that of "insufficiently proven," or "inaccurately observed;" and the establishment of this category of natural phenomena, so far from being only allowable, becomes almost obligatory, for it deals with a class of subjects which play an important rôle in the intellectual development of man. The inaccuracy of the unscientific in these matters deserves this notice; for it is only by careful and accurate observation that the spread of credulity and superstition can be prevented.

We children of the nineteenth century are not a little proud of our civilization, cultivation, and enlightenment, and indeed, in comparison with the Middle Ages, justly so; for since then mighty steps in advance have been made; but, at the same time, our self-approbation should not be too great; for even at present we find theories and beliefs prevalent which would not be listened to a moment if the mass of the people had the vaguest idea of the true methods or results of the study of nature, or a little more respect for them as taught by those worthy of credence.

To give a catalogue of these things would be tedious: it will suffice merely to name the usual manifestations of the spiritualist, table-turnings, spiritual rappings, etc., and animal magnetism, so called. What has been said has been but by way of introduction to our proper subject, those wonderful physiological appearances in animals, which, although long known, have been but recently made the subject of scientific research, under the name of Hypnotism or Braidism, and scarcely yet admitted into the regular list of the phenomena of the physiology of the nervous system.

The attention of Prof. Czermak was called to this subject by the assertion made by a casual acquaintance that he had frequently seen crabs "magnetized," and had even succeeded in doing it himself. This was accomplished by holding the crab with one hand and with the other making "magnetic passes" from the tail to the head of the animal, which under this manipulation soon ceases its struggles, and allows itself to be placed upright, standing upon its claws and head. The crab remains in this state till, by "passes" in the

reverse direction, it is "unmagnetized," when motion reappears, its equipoise is lost, and its full activity returns.

If the same experiment is made, omitting the passes, i.e., if the crab is placed upon its head and two claws and held in that position, after a time the same phenomena will be seen: the animal ceases its struggles and becomes motionless in the unnatural position which it has been forced to assume. To have the return of activity we have but to wait, and, omitting the magical passes altogether, the animal in a short time resumes its wonted movements. The utmost influence that can be laid to the "unmagnetizing" process is that it may by currents of air or the increase of temperature accelerate the return of functional activity to the nervous system. The truth of the matter is, the passes are made and the loss of motion follows, but the relation is but one of time, not of cause and effect. The same results are obtained by suspending the animal by its tail by means of a thread, or even by holding it upon its back by means of a glass rod: in both cases there occur vain struggles followed by immobility. In these last two experiments there can be no question of magnetic force going forth from the experimenter, and yet the same ends are attained. Still further, a careful observation of these animals shows that at certain seasons they fall into this state without any outward influence whatever, so far as can be seen. The so-called magnetizing them by accurate testing and observation shows merely that these animals possess the wonderful power of losing the irritability and conducting power of their nervous system for a time if held in a certain position, in spite of the resistance made by them at first; the passes have nothing whatever to do with the result.

The well-known experiments with hens made as early as 1646 by a Jesuit, by tying the feet, drawing a line from the beak with chalk, and then removing the band from the feet, the hen remaining perfectly quiet for a variable length of time, can be done just as well with the omission of the chalk and the confining band: simply holding the bird in the unnatural position with the neck stretched out, will suffice. Ducks, geese, and even swans, can be treated in a similar way with similar results. In some of the smaller birds the hypnotic state can be induced by holding them on the back, fixing the head by the thumb and finger, and stretching the head and neck somewhat backward: the bird lies still, breathing strongly, but in other respects as if sleeping, in this unnatural position.

A frog laid upon its back quickly seeks to regain its natural position; but by tying a band moderately tight around the upper part of each leg and then placing the animal on its back, it is thrown into the same state as the other animals upon which the experiments have been made. When the pressure made upon the nerves of the skin by the cords is removed, the effect remains some little time, but gradually the frog regains its wonted activity. That in this case the effect depends upon the impression made upon the nerves of sensation, can be demonstrated by the section of these trunks, when these results no longer follow the application of the cords to the limbs. After this experience with the frog, it would appear that the tying of the legs of chickens in the old experiment, although not essential, is still of some influence, and that the result is attained by a series of co-operating influences. In the pigeon the hypnotic state cannot be induced by holding the bird upon its back and stretching the neck, as in the hen, neither by the procedure found successful in the smaller birds; but by affording an object to fix the attention of the eyes of the bird, the same result is attained.

This furnishes us with the third factor of the series of influences,—the fixation of the attention. Of course for this purpose it is not needful to employ the finger of

the experimenter: any inanimate object does just as well: so that it cannot be asserted that any "magnetic" influence is emitted from the person. Chickens can be thrown into this state by means of a piece of pasteboard cut into the form of a horse-shoe and hung over their comb, allowing the ends to come just in front of the eyes: they fall into a condition simulating sleep, in which their heads can be raised or lowered, remaining where placed, as if the neck were made of wax. From all this, two conclusions may be drawn: that by fixing the attention the cataleptic and hypnotic state can be produced, and that this so-called hypnotic state can be induced in animals,—a fact which has been suspected, and even asserted, but which has never been accurately examined into before.

NOTES OF HOSPITAL PRACTICE.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC OF PROFESSOR GROSS, M.D.

Reported by EDWARD L. PARKS.

STRICTURE OF THE ŒSOPHAGUS.

THIS woman, 58 years old, has suffered from stricture of the Œsophagus during the past two years. She is now unable to take any kind of solid food, and she is obliged to swallow liquids with the greatest deliberation, sip by sip, or they always at once regurgitate. It is six weeks since she has taken any solid food. She is losing flesh rapidly, and is so much weakened that she cannot perform the ordinary household duties. She has no pain, except occasionally in the back.

I shall now try to pass an Œsophageal bougie, after having carefully oiled it. It descends a great distance without interruption, showing that the constriction is low down. I shall next try this prostatic catheter, which is longer and will pass through a smaller orifice. It, too, fails to enter the stomach. The examination merely reveals the fact that the Œsophagus is tightly constricted at its lower extremity. Of its nature we cannot speak with certainty. Thirteen years ago Dr. W. H. Pancoast removed her left breast on account of scirrhus. The present trouble may be similar to that which attacked the breast, for it is well known that scirrhus often appears simultaneously in different parts of the body.

It is unusual to find an organic stricture so low down. Usually it is situated opposite the larynx. The disease may be carcinomatous, syphilitic, or caused by the presence of a foreign body, or the effects of lye. I show you the Œsophagus of a child who drank from a cup containing lye. The stricture is so tight that not a drop of water can pass through. The child died emaciated to the utmost degree. A spasmodic stricture of the Œsophagus is a very different affection from an organic one. It occurs in women oftener than in men, and is especially frequent in young girls of a nervous, irritable temperament. It may depend on dysmenorrhœa about the age of puberty, or upon affections of the womb at any period of life, upon spinal irritation, or indigestion. It often appears suddenly with a sense of suffocation. Antispasmodic remedies, as assafoetida, valerian, or Hoffman's anodyne, relieve it. It generally vanishes, as if by magic, at the simple touch of the bougie. The patient should guard against its recurrence, by careful attention to the general health.

The patient before us should make free use of milk punch, and take gentle exercise, when the weather permits, in the open air. Anodynes are not called for,

because of her freedom from pain. Direct interference of any kind would be unjustifiable. Gastrotomy is sometimes employed in cases of this kind, of course only as a *dernier ressort*; but for such an operation the patient is utterly unfitted.

ORCHITIS.

This young man, 17 years old, has a swelling in the left testicle. The organ is the seat of a dull, aching pain, is tender to the touch, hot and hard, with a sense of weight, which is a common symptom of orchitis, especially of the acute variety. The man says he has never had venereal disease; and his statement derives plausibility from the fact that the epididymis is free from inflammation. The common cause of orchitis is gonorrhœa repelled by a cold or mechanical irritation, and then the disease usually begins in the epididymis, or, indeed, may be wholly confined to it so that it is rather epididymitis than orchitis. Another cause is direct violence; and it was doubtless the origin here, for the patient struck his testicle smartly in mounting a horse not long ago.

In all cases of orchitis, serum is effused into the vaginal tunic: hence a part of the treatment consists in drawing off the fluid by one or more punctures. This treatment is suited to the cases only in which the distention is considerable. Much of the hardness depends on effusion of lymph into the seminiferous tubes. Suspension is useful if done judiciously. I shall direct the application of a dozen foreign leeches, followed by a lotion of sugar of lead and powdered opium, dissolved in hot water and used cold. The diet should be strictly light; and a mixture of tartar emetic, epsom salts, and tincture of veratrum viride should be freely exhibited.

It may become necessary to give mercury, but it is not advisable to do so until this treatment has been fairly tried.

CYSTIC HYDROCELE OF CORD.

The boy now before you, gentlemen, is fifteen months old. There is a fulness, not in the scrotum, but in the groin, which has an elastic feel, but cannot be made to disappear by the pressure of my fingers. It is insensible and colorless, except that the tumor under the integument is slightly bluish. You are aware that congenital scrotal hernia is not uncommon; but that is not the case here, for it would have been noticed long ago, whereas the mother says she only noticed this swelling very lately. Hydrocele of the cord may be congenital, and may be associated with scrotal hernia. By making the tumor tense and inserting this exploring-needle, properly oiled, there is an escape of fluid, which establishes the diagnosis beyond doubt. Cystic hydrocele of the cord, then, is the trouble, a disease comparatively rare in children. It is to be treated precisely like that of the vaginal tunic,—by exciting inflammation and thus provoking an effusion of plasma.

EPITHELIOMA OF THE LOWER LIP.

You observe that the lip of this young woman is fissured and covered for the most part with an incrustation. There is a raw surface at one part, but no material hardening anywhere. She has no pain, but occasional itching. Her general health is poor, and she is inclined to be dyspeptic. The first thing to be done is to get rid of the scabs; and for this purpose I shall direct the application of a compress, wet with warm water, at night, to be followed by a lotion containing three drops of the officinal solution of acid nitrate of mercury to the ounce of water. Let her take, besides three grains of blue pill and one grain of ipecac daily, a mixture of Fowler's solution, corrosive sublimate, and tincture of the chloride of iron.

Her blood is deficient in red globules and fibrin. The iron will exert a tonic influence, and Fowler's solu-

tion and corrosive sublimate are each excellent alterants. We shall see her again, and if she is not much improved in two or three weeks I shall remove the offending portion of the lip by a V-shaped incision. She has evidently epithelioma, with a tendency to malignancy.

STONE IN THE BLADDER.

This man, kindly brought here by his physician, Dr. Weisse, is a farmer, 61 years old. He suffered originally from paralysis of the bladder, and during the last four years has been unable to pass his water without the use of a catheter. He now has recourse to that instrument many times in the day, and, according to his statement, from ten to twenty times in the night. He has constantly a burning pain in the bladder and urethra. The constancy and intensity of the pain may be appreciated by the fact that his medical attendant has been giving him daily five grains of morphia, in two doses, without obtaining sleep. Such is the tolerance of opium that pain produces. The urine is occasionally quite bloody. Flatus in the rectum increases the vesical irritability. His bowels are habitually constipated. Dr. Weisse informs me that the prostate is enlarged. This completes the history of the case; and we shall now look for further information by examination.

I introduce this sound, oiled and warmed. If you are very quiet, I think you can all hear the sound of the instrument as it strikes against a stone. I now insert my finger, oiled, into the rectum. The prostate is enlarged in its antero-posterior diameter, so that my finger cannot reach its farther extremity. It is plain that both the stone and the prostatic enlargement are of several years' duration.

The patient says that the pain increases immediately after the passage of water. There is in many cases of this kind a sense of relief at that time.

I shall not operate upon him to-day, because he travelled ninety miles yesterday in coming here, and therefore would ill bear the shock of an operation after so much fatigue. I shall order him, thrice daily, twenty grains of bicarbonate of soda, to obtund the morbid sensibility of the mucous membrane. Experience shows that this remedy is better than the bicarbonate of potash, though they are sometimes combined. He should be well fed, because he is old and weak. Milk punch or ale might be beneficial; though the latter would increase the flow of urine. Sydenham, the Hippocrates of his time in England, suffered with vesical irritability in the latter part of his life, and was much relieved by drinking ale, the lupulin of the hops exerting an anodyne influence.

NEURALGIA.

This man, 47 years old, suffered at one time from pain in the right side and shoulder, so much that he sought relief in one of our hospitals. He is now tormented constantly with sharp, shooting, burning pains in the testicles, especially the left, in the spermatic cords, the bladder, and, more rarely, between the shoulders and along the thighs. He has a scalding and bearing-down sensation on micturition, and he passes, he says, his water every five minutes in the day and night, a statement which is to be taken with some reserve. His bowels are constipated. He does not sleep, and he perspires profusely. He thinks he never fully empties his bladder.

In examining him in the same way that I did the previous case, I find a capacious bladder, not at all fasciculated, though I think there is some roughness at the upper end. The prostate is of natural size. I find no stone, but there may, nevertheless, be one; for, as I have tried to impress upon you, we may only find it after repeated failures to do so. There is a neuralgic element in the case, as is proved by the history of the

case, especially by the fact that he felt pain first in the side and shoulder. The remedy I shall order consists of a combination of uva ursi and soda, the bicarbonate of soda to be added to the infusion of uva ursi after it is prepared.

Of this a tablespoonful and a half, four times daily, in a quarter of a tumbler of water, is to be taken. The uva ursi acts specifically on the bladder, and the carbonate of soda will obtund its sensibility. The patient should abstain from animal food and coffee, and should remain recumbent. He may use tea and milk freely. He is to take, also, morphia and quinia freely.

Fomentations are often useful in such cases; but I shall not use them here.

A NEW METHOD FOR HEALING ULCERS (Dr. Nussbaum: *Wien. Med. Presse*, May 4, 1873).—The author claims to have successfully treated upwards of sixty cases of chronic, extensive, and otherwise intractable leg-ulcers, by the following simple procedure. It is at least worthy of a trial. The patient is first narcotized, and then around the ulcer of the leg or foot, a finger's breadth from its margin, an incision extending down to the fasciæ is made; numerous blood-vessels are divided, and a severe hemorrhage ensues unless a fine pledget of lint be packed into the cut and the entire ulcer strongly compressed. The packing with lint is also necessary to prevent union of the cut edges by the following day. Upon the second day the bandage and lint are removed; from then until a cure is effected a simple water-dressing is applied.

The author states that an astonishing change can be seen, even in the first twenty-four hours: the ulcer, which yesterday threw off quarts of thin, offensive, ichorous pus, furnishes to-day not more than a tablespoonful of thick, non-offensive, healthy pus. The old ulcer becomes rapidly smaller, healing from the margin towards the centre, and is healed in a short-time, but the cut is changed into a broad circular sore, which also speedily cicatrizes.

The great diminution of the secretion, and other favorable changes occurring in the ulcer, find an explanation from the fact that the circumcission has divided dozens of large, abnormally widened blood-vessels. Time is thus given for the lessened nutritive material, which previously was carried off by the excessive secretion, to be transformed into cells and connective tissue; in other words, granulations are formed, which fill up and heal the deep ulcer.

Without claiming this as a radical method, the author assures us that the cure is much more rapid, and the cicatrix becomes more elastic and resisting, than in the ordinary means applied, which usually require so much time that the patients depart with half-cured ulcers, soon to find themselves in their previous deplorable condition.

TEMPERATURE AS AN INDICATION OF FÆTAL LIFE.—According to Cohnstein, the temperature of the uterus is a more certain indication of the life or death of the fœtus than either its movements or the beating of its heart. The fœtus has a higher temperature than the mother, and imparts it to the uterus; so that this organ is warmer than the axilla, or even than the vagina. If the child die, the temperature of the uterus falls to the level of that of the other parts of the body, and even, Cohnstein says, below this, as the dead fœtus abstracts heat from it. This fall of temperature becomes perceptible two or three hours after the death of the fœtus, and may be ascertained by introducing a curved thermometer a little way beyond the inner os uteri. In this way, also, the diagnosis between intra-uterine and extra-uterine pregnancy may be assisted.—*British Medical Journal*.

PHILADELPHIA MEDICAL TIMES.

A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, JUNE 21, 1873.

EDITORIAL.

A PRACTICAL REFORMER.

MOST of our readers will remember the travail, some years since, of President Bergh, of New York, and of the Female Branch of the Pennsylvania Society for the Prevention of Cruelty to Animals, on account of the frightful tortures inflicted by the physiologists upon the lower animals. As the wicked physiologists have continued to torture the unfortunate dogs, cats, rabbits, rats, and other creatures in the lower ranks of life, it is to be hoped that time and usage have rendered these aforementioned philozoists less sensitive, and thereby relieved their sympathetic sufferings. Feeling, however, as we do for them, we hail with delight a prospect of relief. One Mr. Rusden, of Melbourne, Victoria, has read an essay before the Royal Society of the place, containing a proposition which does honor to his heart and head, and which will do away with all excuse for the unhallowed practices at present indulged in.

Being of a practical as well as of a philanthropic turn of mind, Mr. Rusden proposes to accomplish several ends at once. When his scheme is carried out, "the honest, starving poor will no longer be so mistaught as that crime will entitle to state maintenance, and solve all their difficulties," and "criminals, by being made to work for their support, will not compete with honest labor." Hence there is the solution of the vexed question, What shall we do with our criminals? The convicted

persons are to be utilized as subjects for physiological, medical, and surgical experiments. For this purpose they are to be divided into three classes. 1. Those convicted of minor offences, who are only to be employed in testing the value of various forms of diet, or of such drugs as can cause but little pain or inconvenience. 2. Those guilty of serious offences, on whom graver experiments are to be practised, but in whom life is not to be risked. 3. Those convicted of the highest grades of crimes, in whom life is to be freely put in peril.

As already stated, the mind of Mr. Rusden is both humane and practical: humane, because, according to the new code, "no unnecessary pain shall be inflicted;" in fact, it will be generally indispensable to avoid it by means of anæsthetics; practical, since, he says, "a fourth advantage is the enormous reduction of cost in the final disposal of criminals which would obviously result; as all the worst criminals would be utilized for experiments involving so much risk or certainty of death as would speedily reduce their numbers. I believe that the present cost of disposing of criminals would be reduced far more than fifty per cent., and that the supply of subjects for experiment would soon fall far short of the demand." The enthusiasm of Mr. Rusden is quite contagious. We feel its influence, and sincerely hope that the legislature or house of assembly of Victoria will not fail to give the stamp of actuality to his suggestion. We shall watch with interest for the passage of the needful laws, and then, if it be not too late, shall apply for a position upon the well-paid medical staff appointed to carry out its provisions. Let us trust that the time is not far distant when troubled visions shall no longer haunt the sleep of rabbits, dogs, cats, and their congeners.

BABIES AND BEEF-TEA.

WE have long thought that the statistical patriots were on the wrong track in their perennial lamentations over the decadence of our native population, in so far that they are continually urging for the birth of more children. From our point of view it is much more decisive in the increase of a people how many infants live than how many are born. Moderate-sized families of strong, healthy, well-trained children we hold to be of much more value to the state than great litters of under-nourished babies,—early candidates for the grave-yard.

It is, therefore, with great pleasure that we see our Obstetrical Society, instead of fulminating anath-

emas, devoting its attention to the reduction of infant mortality. Under its direction there have been recently issued special rules for the management of infants during the hot season, in a little pamphlet, which ought to be, and we believe is to be, scattered broadcast throughout our city. When the summer's season is fairly upon us, we hope the committee will see that the rules are published in at least one of our daily papers.

The rules themselves are excellent, and worthy of the array of names by which they are signed. Unfortunately, in one of a series of receipts added to them there is a very serious misstatement, which, as it supports a popular error, and relates to an intensely practical point, suggests a comparison between the committee and the famous cow that gave a good pail of milk, etc.

We do not propose to insult the intelligence of our readers by offering proof that beef-extract and beef-essence contain at most only a homoeopathic allowance of nutriment; yet constantly mothers, nurses, and, we may add, even doctors, are dosing with these preparations children and adults, under the delusion that they are feeding them,—a delusion which is already sufficiently chronic in most of the individuals afflicted thereby, but which we fear will be rendered hopelessly incurable by the assertion of this learned committee that beef-tea when made in accordance with a certain receipt contains the whole nourishment of the beef. There is undoubtedly a difference between beef-tea and beef-essence; but, as this is not distinctly stated in the pamphlet of the Obstetrical Society, the assertion alluded to will certainly confirm error in the mind of the popular audience to which the rules are chiefly addressed.

More to the point, perhaps, is the fact that the statement of the committee is very far from being true as regards beef-tea. The receipt may be found in another column of our issue. It is very evident that, when beef-tea is made in accordance with its directions, only such matters as are soluble in water are extracted from the meat, the fibrin, the muscular fibre, etc. being left behind, whilst the kreatinin, carnin, and other innutritious products of destructive metamorphosis, with the inorganic salts, are dissolved.

It is equally evident that the only nutriment contained in this Obstetrical fluid is albumen. We have had a pint of the beef-tea carefully prepared according to the receipt of the committee, and on adding to it nitric acid obtained precisely one hundred and ninety-one and a half grains of precipitate. The truth of the following formula consequently rests

upon the official declaration of the Philadelphia Obstetrical Society: Albumen 3iij = Beef one lb.

We do not mean in any sense to deny the value of beef-tea when properly used. We do mean to insist that as a food it is an extremely wasteful preparation, and that to tell the poor of the community that they are giving to their children all the nourishment of the beef in giving beef-tea is to practise unwittingly a great fraud upon them.

Moreover, we desire to call the attention of physicians to the fact that beef-tea contains so much potash that when given in large quantities it is a medicinal agent and can only be intelligently employed with a direct appreciation of this fact.

According to Lehman's analysis, a pound of beef contains about forty grains of potash; and, as this is all extracted by the water, the beef-tea of the Society contains at least one-fifth as much potash as albumen.

PROPYLAMINE.

THE amount of attention which this alkaloid is attracting in Paris and in London, and the assertions which are made of its novelty, strike us as being something extraordinary, seeing that it was tried more than ten years ago in this city for the very complaints—*i.e.* rheumatic troubles—in which it is now lauded abroad, and was found wanting. Whether it will prove more reliable now than it did then, whether it was used here in too small doses to be effective, we cannot tell. Those of our readers who desire all the information that is possessed of its action are referred to Guibourt's "*Traité des Médicaments Nouveaux*," second edition, 1865, and to an inaugural thesis published at Strasbourg, in 1870, by M. Fargier Lagrange, who speaks of it under the name of Trimethylamine. He claims that it "diminishes the intra-organic combustion, and lessens the elimination of urea; decreases the activity of the circulation, and lowers the temperature; and exercises a sedative action on the nervous system, manifestly diminishing the neuralgic and articular pains."

It is stated that the best results are obtained in the most acute forms of inflammatory rheumatism.

THE *New York Medical Journal* for June is mistaken in asserting that the Jefferson Medical College of this city failed in its effort to obtain a State appropriation last winter. As most of our readers, no doubt, know, the legislature granted it all that was asked for.

PROCEEDINGS OF SOCIETIES.

BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES.

MAY 5, 1873.

DIRECTOR W. S. W. RUSCHENBERGER, M.D., in the chair.

PRESENT.—Prof. J. Carson, and Drs. J. G. Hunt, F. W. Lewis, Tyson, Allen, McQuillen, Norris, Buckingham, and Richardson.

Dr. J. GIBBONS HUNT made a very interesting and useful verbal communication in regard to the use of extract of hæmatoxylon in the preparation of stainings of both animal and vegetable tissues. In the course of his remarks he stated that, after repeated experiments with the solution as recommended by Dr. J. W. S. Arnold, of New York, he had been led to modify the liquid by the addition of glycerin, which was found to render it much more satisfactory as a coloring material. The proportions which yielded, in his hands, the best results, were,—

Arnold's solution (of alum and	f 3 ss;
ext. of hæmatoxylon),	f 3 j;
Glycerin,	f 3 j;
Alcohol,	f 3 j.

This fluid, which when poured out into a watch-glass for use should be perfectly transparent, resembles carmine in that it stains the nucleus of a cell very deeply; but it also faintly colors other portions of the cellular elements, of different degrees and tints. Like chloride of gold, it enables us to demonstrate the very finest net-works of non-medullated nerve-fibres running from nucleus to nucleus in the coat of an artery, and it possesses the great advantage over the auriferous salt, that after such staining of the nerve-tissue we can still study the ultimate structure of the nervous filaments.

Dr. HUNT observed that in vegetable histology hæmatoxylon had certain advantages over either aniline, carmine, or carthamus, among which he might mention the fact that when, as is too frequently the case, we over-stain a specimen, this excess of color from hæmatoxylon may be in part removed by maceration in a weak acetic acid solution.

In conclusion, Dr. HUNT exhibited several exquisite specimens of hæmatoxylon stainings, and particularly invited a comparison of their value with that of a thin section from an example of cirrhosis of the liver from the Army Medical Museum at Washington.

After the meeting, Dr. HUNT also displayed the lines of dots upon a frustule of *Pleurosigma angulatum* under a $\frac{1}{16}$ inch objective, but magnified by the aid of an amplifier, draw-tube, and deep eye-piece 1800 diameters without serious loss of definition.

Dr. JAMES TYSON remarked that in his laboratory work, with the hæmatoxylon solution, as prepared according to Arnold's directions with alum and water, he had met with the same difficulties as his friend Dr. Hunt. Although he diluted the coloring liquid to one-fourth the strength recommended, he nevertheless found that specimens stained with it, whether mounted in oil of cloves or in damar, were ruined after a short time by the formation of octahedral crystals upon the under surface of the glass cover. In diluting the solution (Arnold's) with alcohol, he had several times found that a precipitate was formed; but this misfortune did not occur when water alone was employed.

Dr. HUNT suggested that the troublesome crystals which destroyed the value of these specimens were probably composed of alum, which, being insoluble in oil of cloves, was deposited on the surface of the glass.

REVIEWS AND BOOK NOTICES.

THE TREATMENT OF SYPHILIS WITH SUBCUTANEOUS SUBLIMATE INJECTIONS. By Dr. GEORGE LEWIN, Prof., etc. Translated by CARL PROEGLER, M.D., late Surgeon, etc., and E. H. GALE, M.D., late Surgeon, etc. Demi 8vo, pp. 249. Philadelphia, Lindsay & Blakiston, 1872.

The wide spread of syphilis among all classes, the dreadful suffering which it entails, and the proverbial tendency which it has to relapse, all combine to make the profession and the public hail with the utmost gladness any method of treatment which promises even a fair prospect of permanent cure. Hypodermic medication has assumed great importance within the last few years, and it is not at all strange that it has been proposed to treat constitutional syphilis in this way. Prof. Lewin has, probably, employed the method for a longer period and in a larger number of cases than any other living man, both in his private practice and in the Charité Hospital at Berlin. This fact gives his testimony an air of authority, and American physicians cannot but congratulate themselves that this work, notwithstanding its many short-comings, has been placed within their reach. The author, who claims to have originated this method of treatment, and to have introduced it into the Charité seven years ago, probably speaks of his results a little too enthusiastically; but his views are undoubtedly entitled to a careful consideration, especially as he tells us in his preface that he has treated more than two thousand patients by this method.

The injection is made in the usual way, and the author prefers to introduce the remedy beneath the skin of the subscapular and sacral regions. He selects these parts because he believes them to be less sensitive than others, and not because their power to absorb is greater. The injection seems to produce but little irritation, for, among one thousand patients treated by Prof. Lewin in private practice, he has had only one small abscess upon the fore-arm. This shows that the inconveniences to the patient cannot be very great; and indeed, according to the author's showing, they are not sufficient to form a reasonable objection to the treatment.

The local effects of this form of medication vary with the strength and quantity of the solutions employed. Prof. Lewin uses three of these: one three, another four, and the other six grains to the ounce of distilled water; and he injects from one-tenth to three-eighths of a grain of the remedy (p. 19).

In his description of the symptoms produced by the hypodermic injection of the medicine (p. 25) it is interesting to note that the ordinary effects of mercury are sometimes rapidly produced by the bichloride when it is administered in this way. It is evident from his own statements that these have been severe in some cases. The patients not only presented the ordinary symptoms of salivation, but when the dose was large the medicine acted as a powerful irritant, producing profound depression with symptoms of gastro-enteritis. The resemblance of "acute sublimate intoxication," as the author calls it, to the effects of corrosive sublimate when taken into the stomach, is very striking, and is almost sufficient to make one wonder whether the advantages of hypodermic medication are not somewhat overrated.

It has been said that salivation is produced with difficulty by the internal administration of the bichloride of mercury. This does not seem to be the case when it is administered by hypodermic injection; for many of Dr. Lewin's patients were salivated by it, since he states (p. 28) that mercurial stomatitis occurred in 144

of 256 women thus treated, and that in 79 of these the use of the medicine had to be stopped on account of the mouth-affection. We are not at all surprised at this, for the author certainly employs large doses of the drug. A considerable experience has led the writer to believe that few patients will bear much over one-twelfth of a grain, three times daily, by the stomach, while we find Prof. Lewin often gives three-eighths of a grain at a single dose. True, this is administered but once daily, as a rule; but the quantity seems to us to be large in proportion to that which should be used by the mouth.

This opinion is supported by the statements of the author, and a critical examination of the cases which he reports. He says (p. 26) the sublimate "often very quickly" salivates, and that he has frequently noticed the appearance of the symptoms of salivation "after a few hours only." As this effect does not promote but may rather retard the cure, we think that the dose should generally be smaller than those ordinarily injected by Prof. Lewin.

The results obtained by the author certainly appear to be very favorable to the administration of mercurials by hypodermic injection. His patients seem to have been relieved quickly, while among them relapses do not appear to have been so frequent as when the mercury is administered by the mouth or the patient treated by other methods.

We cannot dismiss the consideration of this work without saying something in regard to the manner in which the translators have done their part. Whenever a translated German book is put upon our table we expect to find it rather heavy, and with certain peculiarities of expression which are unavoidable. We are content now and then to pore over a sentence for some time to find its exact meaning; but even in these cases we expect to meet with good English. Such, however, is not true in the present instance. With a more sad jumble of bad grammar and atrocious language it has never been our fortune to meet; and, for the credit of our profession in this country, we hope that Prof. Lewin does not understand our tongue, and, if he does, for the sake of his own feelings we most sincerely desire that this execrable translation of his book may never fall into his hands. So poorly have these gentlemen done their work that the very first sentence in the book sounds most harsh, while the second is enough to make us close it forever. There is hardly a page in it that does not show the want of the proof-reader; whilst the volume is teeming with grammatical errors. These faults are bad enough in the work of an English author, but they detract much more from the translation of one the original language of which is somewhat peculiar and difficult at best to render into smooth English.

We do not consider the publishers blameless in putting this translation of Prof. Lewin's work before the medical public. The enterprising firm which issued it usually does things in good style. Of this book, however, they have every reason to be thoroughly ashamed. A few glances at the proof-sheets would have made them acquainted with the glaring literary errors of the translation. To see these, a professional education was not necessary; and if the book proves a financial failure they have themselves to blame. It will not be because it has no merit and was not needed, but simply because the English version of it has been so abominably prepared.

CONIUM IN THE TREATMENT OF INSANITY. By DANIEL H. KITCHEN, M.D., Assistant Physician of the New York State Lunatic Asylum.

In this article, reprinted from the April number of the *American Journal of Insanity*, the author strongly

advocates the use of conium in cases of acute mania not dependent upon organic lesion of the brain, and especially in those cases characterized by unusual restlessness and muscular activity. He agrees with Harley in limiting the action of the drug to the motor centres, chiefly to the corpora striata, and does not attribute to it any direct hypnotic effect or any appreciable influence upon the secretions.

Quoting from Dr. J. W. Burman, who experimented at the West Riding Lunatic Asylum, he says, "Conia acting upon the purely motor centres in a sedative manner, and morphia acting in a similar way upon the sensorimotor and ideomotor centres, it follows as a fair corollary that the combination of the two should lead to effects directly antagonistic to the condition of maniacal excitement; and, such being in fact the case, they may be thus used together with very great success in the treatment of cases of mania."

He details twelve cases of mania, arising from various causes, which were treated with conium, and in all of which its administration was followed by immediate and marked improvement and ultimate cure. In several of them bromide of potassium, chloral hydrate, and other nervines had entirely failed to relieve the wakefulness and excitement, which at once disappeared under full doses of conium. He has used it in epilepsy, hysteria, facial erysipelas, dysmenorrhœa, sciatica, etc., always observing the same results,—relief of motor irritability and consequent amelioration of the general condition. Of the different preparations he prefers the fluid extract, in doses of from twenty minims to one drachm, according to the motor activity of the patient, and has found the best vehicle to be ice-cold water.

THE TREATMENT OF WHOOPING-COUGH WITH QUININE. By B. F. DAWSON, M.D., Clinical Lecturer on the Diseases of Children in the Medical Department of the University of New York, etc., etc. New York, William Wood & Co., 1873.

In this little pamphlet, reprinted from the *American Journal of Obstetrics and Diseases of Women and Children*, the author reports eight cases of pertussis occurring in his practice and treated exclusively with quinine, administered according to the following rules:

1. Give the quinine (sulphate or hydrochlorate) dissolved by acid in pure water only. For children under three years, from grs. v to grs. viii, and for older children and adults, from grs. x to grs. xii, to the ounce.
2. Give not less than a teaspoonful every single, or, at the longest, every two hours during the day, and whenever cough comes on in the night.
3. Give nothing afterwards for some minutes to destroy the taste or to wash out the mouth.
4. Continue giving it notwithstanding the first dose may be vomited.
5. Be sure that the quinine is pure and thoroughly dissolved.

He asserts that by following this plan he has rarely failed in promptly and completely removing the spasmodic element of the affection, the time required varying from one to twenty days. He supposes that the drug acts by attacking and destroying the "fungoid growth in the epithelium of the air-passages," which, with Prof. Letzerich, he believes to be the cause of the convulsive paroxysms of coughing. He also attributes some of the beneficial effects of the quinine to its sialagogue action, the increased buccal and salivary secretions softening and dislodging the accumulated mucus. For both these reasons he insists, as above, upon its administration in solution, and at short intervals, and accounts for its failure in previously reported cases by its having been given in large doses or in pills. The cough which frequently remains after the "whooping" has ceased must be treated as an ordinary bronchial catarrh.

GLEANINGS FROM OUR EXCHANGES.

ON THE USE OF ARTIFICIAL RESPIRATION AND TRANSFUSION AS A MEANS OF PRESERVING LIFE (*British Medical Journal*, May 17, 1873).—Dr. T. Lauder Brunton, of St. Bartholomew's Hospital, presents, in an interesting and valuable paper, a review of various important physiological experiments and observations, and shows how they may be utilized in the treatment of disease. Quoting Huxley, he says, "Life has but two legs to stand upon,—the lungs and the heart; for death through the brain is always the effect of the secondary action of the injury to that organ upon the lungs or the heart." The experiments of the Abbé Fontana, Legallois, and Brown-Séquard have shown that headless trunks, isolated portions of the body, or the head alone, may be kept alive, or even restored to life, by a proper supply of oxygenated blood, and not only have nerves and muscles been made to retain vitality, but livers have secreted bile and lungs excreted carbonic acid hours after they were excised from the body.

A point of great practical importance is that the parts do not all die at the same time, and, as the brain and spinal cord generally die first, the heart may pulsate regularly after all respiratory movements have ceased and consciousness and reflex action are entirely lost. If, under such circumstances, respiration be kept up artificially, the heart continues beating, and the circulation of arterial blood through the brain may gradually restore its power, respiration recommence, and life be securely re-established. Schiff's experiments have demonstrated that animals may be kept alive, after almost entire destruction of the medulla, or after the injection of water under high pressure into the cranial cavity. Hence it is evident that we may hope for the best results from the use of artificial respiration in some of those cases of apoplexy where an extravasation almost instantly arrests the respiratory movements, either directly, by destroying a part of the medulla, or indirectly, by causing compression of the brain.

In poisoning by woorara, hydrocyanic acid, strychnia, etc., as well as by the bites of snakes, artificial respiration is invaluable as the only means of affording time for the excretion of the toxic agent. Where the poison exists in large quantities, or is excreted very slowly, requiring hours or even days before it can be got rid of, the obvious plan of treatment would be to remove the poison along with the blood in which it is circulating, instead of waiting for its slow removal by the emunctories; and here transfusion comes to the aid of artificial respiration.

Dr. Brunton details some cases where this method of treatment was followed by almost veritable resurrection. Alluding to the objections raised by Larry to the employment of lambs' or calves' blood when human blood cannot be obtained, he states that there is no physical reason why it should not be used, and concludes by remarking that "the risk of injuring a man's character, or that of his descendants, by transfusion of an animal's blood, is not for an instant to be weighed in the balance against the chance of saving his life in those cases where alone the operation would be performed."

SEPTICÆMIA AND THE CATHETER (*British Medical Journal*, April 19, 1873).—Dr. David Ferrier, of King's College, in a short paper endeavors to show that the ammoniacal decomposition of the urine met with in retention is not the result of a fermentative action of the vesical mucus, but is attributable to the growth and multiplication of microscopical organisms, generally introduced during catheterization. To prove that urine in itself, apart from such contamination, is not liable to

decomposition, he introduced a small quantity into a flask previously purified by heat, inserted a plug of cotton wool, and set it aside for a year, during which time it remained clear. The simple bringing into contact with the urine a surface not freed from germs, as an ordinary glass rod, was found sufficient to initiate ammoniacal putrefaction. He does not deny that in a catarrhal state of the urethra germs may gain access to the bladder precisely as spermatozooids pass through the cervical mucus in impregnation; but asserts that in ordinary conditions of the urinary passages the bladder is closed against them, and adduces cases where the introduction of the catheter was immediately followed by a change in the character of the urine, and subsequently by uræmic poisoning and death. Such cases are, of course, not those where the bladder can be readily and entirely emptied, but where, from atony, paralysis, or enlarged prostate, there is more or less complete retention of urine. He adds, that if the simple precaution were taken of using carbolic acid oil, instead of ordinary oil, for lubricating instruments passed into the bladder, we would have less cystitis and fewer cases of "surgical kidney."

SUCCESSFUL TRANSPLANTATION OF A RABBIT'S CONJUNCTIVA AND ITS ADAPTATION TO THE HUMAN EYE.—J. R. Wolfe, of Glasgow, reports the case of a foundry-man 31 years of age, where, in consequence of a severe burn from a mass of red-hot iron, there had resulted an extensive symblepharon, gluing the lower lid firmly to the ball in such a position that its ciliary border covered the upper edge of the pupil. Six weeks after the injury, when the inflammation had entirely subsided, Dr. W. dissected the lower lid from its attachments to the ball, and, to prevent its readhering, sutured on the raw surface thus produced the conjunctiva which he then dissected from the eye of a rabbit. (The animal was under the influence of chloroform, and the part selected was that covering the nictitating membrane.) The eye was dressed with dry charpie and a compressive bandage. On the day following, the transplanted conjunctiva had a grayish aspect, and warm fomentations were ordered. On the second day the eye was swollen and very painful, but the conjunctiva had lost its gray hue and become vascular. On the eighth day he was discharged cured, the eyeball freely movable and the transplanted conjunctiva healthy and adherent throughout. A few days subsequently, an iridectomy was successfully performed at the upper inner quadrant of the cornea, with the result of restoring him useful eyesight. The patient was seen two months subsequently, and the condition of the eye was still entirely satisfactory.

The author then gives a second, somewhat similar case, with equally favorable result.—*Glasgow Medical Journal*, 1873.

ALBUMINURIA AND HÆMATURIA FROM EMBOLISM IN THE MINUTE BLOOD-VESSELS OF THE KIDNEY (*British Medical Journal*, May 24, 1873).—Dr. George Johnson, of King's College, London, in a recent lecture on Bright's disease, alludes to valvular disease of the heart as a not infrequent cause of albuminous or even bloody urine by the production of renal embolism. The circulation through the renal capillaries being arrested, an albuminous and fibrinous exudation takes place into the uriniferous tubes, which subsequently becomes fatty and is absorbed, leaving a depressed cicatrix on the surface of the kidney.

Alluding to the uncertainty of the diagnosis of embolism in the renal vessels, he adds, "We may suspect the occurrence when, with the physical signs of aortic or mitral disease, without great impediment of the general circulation, the urine suddenly becomes albuminous or bloody. In some cases, extensive em-

bolism in one or both kidneys has been attended with severe lumbar pains, a scanty secretion of urine, and vomiting; but, when the obstructed portions of kidney are small, there may be no symptoms to indicate the occurrence of embolism."

THE TUBERCULAR ULCER IN THE LARYNX (Wahlberg: *Wien. Med. Jahrb.*, 1872, Heft 3, 238-247).—An examination of a large number of larynges of phthisical patients has led the author to the conclusion that the so-called tubercular ulcers of the larynx result from the disintegration of mucous or sub-mucous tubercles. Fine cuts of the mucous membrane hardened in chromic acid showed at the points of the most recent tubercles, which had only produced a prominence, and not a defect of the surface, a very fine, small-celled infiltration, which attained its maximum in the vicinity of the ducts of the mucous glands. After pencilling out these round cells, a net-work was seen, coarser and denser according to the age of the tubercle; its meshes, formed partly out of spindle-cells and partly out of a tough fibrous tissue, were scantily supplied with blood-vessels. The centre of this reticulum was taken up by a round heap of an opaque, finely granular mass, which the author, without giving any special characteristics, describes as tubercle.

As the more and more attenuated epithelial covering of the tubercle becomes destroyed and perforated, the tubercular ulcer is produced, whose basis is constituted by the progressively spreading destruction of the new cellular growth. Upon the edges of the ulcer are frequently seen papillary prominences of the mucous membrane, with cylinder-like proliferations of the epithelial covering.

CHANGES PRODUCED IN THE LIVER BY A HIGH TEMPERATURE (*Lancet*, May 17, 1873).—At the regular meeting of the Pathological Society of London, Dr. Wickham Legge exhibited some microscopical sections of the liver of rabbits killed after an exposure of from six to twelve hours to a temperature of 105°. In all the animals the livers were found very dry, but little blood exuded from a cut surface, and the acini were indistinct. The liver-cells were filled with fine granular contents, so that in some cases the nucleus was invisible. Dr. Legge remarked that it was well known that parenchymatous degenerations of the liver were far more common than was formerly supposed. Excluding phosphorus-poisoning, acute yellow atrophy, and cases akin thereto, this finely granular condition of the cells had been chiefly met with where a high temperature had been noted; but no experimental proof whatever had existed that it was due to this cause. The cloudy swelling of the kidney in febrile diseases had long ago been noticed; but probably in patients dying from diseases attended with high temperature the liver suffers far more than the kidneys, and far more commonly.

METHYLENE ETHER AS AN ANÆSTHETIC (*British Medical Journal*, March 29, 1873).—Dr. J. O. Brookhouse details seven cases in which methylene ether was given as an anæsthetic. The average quantity required to produce insensibility was two and a half drachms, the average time between three and four minutes. In conclusion, he says, "It appears clearly, therefore, from these cases, that this ether is a direct paralyzer of the heart, and not certainly in any less degree than chloroform. This, indeed, so far as I can judge, is its only objection; whilst in many ways it possesses advantages. It is quicker in its action and time of recovery. Sickness, although almost always present, is not so persistent; and the patient does not complain of feeling so altogether 'seedy.' It does not blister the skin."

EXTREME DEPRESSION AND PARALYSIS PRODUCED BY HYDRATE OF CHLORAL.—Henry J. Manning details (*Lancet*, May 17, 1873) two cases of monomania with exacerbations of excitement and obstinate sleeplessness, in which the administration of chloral was attended with very alarming symptoms. In one case, an elderly man, who had taken five grains twice daily and thirty grains on alternate nights for about two months, became so weak and depressed that he was unable to make the slightest exertion, and suffered from partial loss of muscular power in the lower limbs.

In another case, ten grains twice daily, with forty grains on alternate nights, produced in three weeks the same condition, with cold surface, fluttering pulse, and complete paralysis of the lower limbs.

In neither case was there any loss of sensation or any hyperæsthesia.

Liq. strychniæ was prescribed, and in a few days both patients regained their usual condition.

SPONGE-TENT IN EPISTAXIS.—Dr. James Young (*British Medical Journal*, May 17, 1873) recommends the use of sponge-tent in cases of bleeding from the nose, and gives the following method of preparation: "Have a long piece of fine sponge, dipped in a solution of gum, compressed with twine, dried; and, after the twine has been unrolled, the sponge is thickly coated over with white wax. This is easily passed along the floor of the nostril, leaving a piece of red tape for extraction. The tent may remain for six hours, and must be gently rotated before extraction, to prevent fresh hemorrhage."

THE HEART, IN A CASE OF POISONING BY ARSENIC.—Surgeon E. O. Tandy reports (*Indian Medical Gazette*, Calcutta, March 1, 1873) a case where a post-mortem made twenty-six hours after death, the subject being well nourished and in perfect preservation, disclosed extravasations of bluish blood in the muscular structure and columnæ carneæ of the left ventricle, with no signs of inflammation and a healthy endocardium. Death was subsequently found to have resulted from the criminal administration of arsenic.

ARTIFICIAL FIBRIN AS A DIETETIC SUBSTANCE.—Dr. John Goodman (*British Medical Journal*, May 17, 1873) calls attention to a substance formed by exposing albuminous material, as an ordinary hen's egg, to the action of cold water for about twelve hours, and then boiling. He calls the product "artificial fibrin," and declares it to be unparalleled in its qualities of lightness, nutrition, and digestibility, and invaluable in cases of feeble alimentation where rejection of food forms a prominent feature.

MISCELLANY.

WE are informed that Prof. Pancoast has resigned the chair of anatomy at the Jefferson Medical College. Dr. William Thomson, well known as the author of some highly original contributions to eye-surgery, has been elected to the position of clinical lecturer on diseases of the eye in the same institution.

RULES FOR THE MANAGEMENT OF INFANTS DURING THE HOT SEASON.—*Rule 1*.—Bathe the child once a day in tepid water. If it is feeble, sponge it all over twice a day with tepid water, or with tepid water and

vinegar. The health of a child depends much upon its cleanliness.

Rule 2.—Avoid all tight bandaging. Make the clothing light and cool, and so loose that the child may have free play for its limbs. At night undress it, sponge it, and put on a slip. In the morning remove the slip and dress the child in clean clothes. If this cannot be afforded, thoroughly air the day-clothing by hanging it up during the night. Use clean diapers, and change them often. Never dry a soiled one in the nursery or in the sitting-room, and never use one for a second time without first washing it.

Rule 3.—The child should sleep by itself in a cot or cradle. It should be put to bed at regular hours, and be early taught to go to sleep without being nursed in the arms. Without the advice of a physician, never give it any *spirits, cordials, carminatives, soothing-syrups, or sleeping-drops. Thousands of children die every year from the use of these poisons.* If the child frets and does not sleep, it is either hungry or ill. If ill, it needs a physician. Never quiet it by candy or cake; they are the common causes of diarrhoea, and of other troubles.

Rule 4.—Give the child plenty of fresh air. In the cool of the morning and evening send it out to the shady sides of broad streets, to the public squares, or to the Park. Make frequent excursions on the rivers. Whenever it seems to suffer from the heat, let it drink freely of ice-water. Keep it out of the room in which washing or cooking is going on. It is excessive heat that destroys the lives of young infants.

Rule 5.—Keep your house sweet and clean, cool and well aired. In very hot weather let the windows be open day and night. Do your cooking in the yard, in a shed, in the garret, or in an upper room. Whitewash the walls every spring, and see that the cellar is clear of all rubbish. Let no slops collect to poison the air. Correct all foul smells by pouring carbolic acid or quicklime into the sinks and privies. The former article can be got from the nearest druggist, who will give the needful directions for its use. Make every effort yourself, and urge your neighbors, to keep the gutters of your street or court clean.

Rule 6.—*Breast-milk is the only proper food for infants.* If the supply is ample, and the child thrives on it, no other kind of food should be given while the hot weather lasts. If the mother has not enough, she must not wean the child, but give it, besides the breast, goat's or cow's milk, as prepared under Rule 8. Nurse the child once in two or three hours during the day, and as seldom as possible during the night. Always remove the child from the breast as soon as it has fallen asleep. Avoid giving the breast when you are over-fatigued or overheated.

Rule 7.—If, unfortunately, the child must be brought up by hand, it should be fed on a milk-diet alone, and that, warm milk out of a nursing-bottle, as directed under Rule 8. Goat's milk is the best, and next to it, cow's milk. If the child thrives on this diet, *no other kind of food whatever should be given while the hot*

weather lasts. At all seasons of the year, but especially in summer, there is no safe substitute for milk to an infant that has not cut its front teeth. *Sago, arrow-root, potatoes, corn-flour, crackers, bread, every patented food, and every article of diet containing starch, cannot and must not be depended on as food for very young infants.* Creeping or walking children must not be allowed to pick up unwholesome food.

Rule 8.—Each bottle-full of milk should be sweetened by a small lump of loaf-sugar, or by half a teaspoonful of crushed sugar. If the milk is known to be pure, it may have one-fourth part of hot water added to it; but, if it is not known to be pure, no water need be added. When the heat of the weather is great, the milk may be given quite cold. Be sure that the milk is unskimmed; have it as fresh as possible, and brought very early in the morning. Before using the pans into which it is to be poured, always scald them with boiling suds. In very hot weather, boil the milk as soon as it comes, and at once put away the vessels holding it in the coolest place in the house,—upon ice if it can be afforded, or down a well. Milk carelessly allowed to stand in a warm room soon spoils, and becomes unfit for food.

Rule 9.—If the milk should disagree, a tablespoonful of lime-water may be added to each bottleful. Whenever pure milk cannot be got, try the condensed milk, which often answers admirably. It is sold by all the leading druggists and grocers, and may be prepared by adding, without sugar, one teaspoonful, or more, according to the age of the child, to six tablespoonfuls of boiling water. Should this disagree, a teaspoonful of arrow-root, of sago, or of corn-starch to the pint of milk may be cautiously tried. If milk in any shape cannot be digested, try, for a few days, pure cream diluted with three-fourths or three-fifths of water,—returning to the milk as soon as possible.

Rule 10.—The nursing-bottle must be kept perfectly clean; otherwise the milk will turn sour, and the child will be made ill. After each meal it should be emptied, rinsed out, taken apart, and the tube, cork, nipple, and bottle be placed in clean water, or in water to which a little soda has been added. It is a good plan to have two nursing-bottles, and to use them by turns.

Rule 11.—Do not wean the child just before or during the hot weather, nor, as a rule, until after its second summer. If suckling disagrees with the mother, she must not wean the child, but feed it in part, out of a nursing-bottle, on such food as has been directed. However small the supply of breast-milk, provided it agrees with the child, the mother should carefully keep it up against sickness: it alone will often save the life of a child when everything else fails. When the child is over six months old, the mother may save her strength by giving it one or two meals a day of stale bread and milk, which should be pressed through a sieve and put into a nursing-bottle. When from eight months to a year old, it may have also one meal a day of the yolk of a fresh and rare-boiled egg, or one of beef- or mutton-broth into which stale bread has been crumbled. When

older than this, it can have a little meat finely minced; but even then milk should be its principal food, and not such food as grown-up people eat.

For the convenience of mothers, the following receipts for special forms of diet are given:

Boiled Flour, or Flour Ball.—Take one quart of good flour, tie it up in a pudding-bag so tightly as to get a firm, solid mass, put it into a pot of boiling water early in the morning, and let it boil until bedtime. Then take it out and let it dry. In the morning, peel off from the surface and throw away the thin rind of dough, and, with a nutmeg-grater, grate down the hard dry mass into a powder. Of this from one to three teaspoonfuls may be used, by first rubbing it into a paste with a little milk, then adding it to about a pint of milk, and, finally, by bringing the whole to just the boiling point. It must be given through a nursing-bottle.

An excellent food for children who are costive in their bowels may be made by using bran-meal or unbolted flour instead of the white flour, preparing it as above directed.

Rice-Water.—Wash four tablespoonfuls of rice, put it into two quarts of water, which boil down to one quart, and then add sugar and a little nutmeg. This makes a pleasant drink.

A half-pint or a pint of milk added to this, just before taking it from the fire, and allowed to come to a boil, gives a nourishing food suitable for cases of diarrhoea.

Sago, tapioca, barley, or cracked corn can be prepared in the same manner.

Beef-Tea.—Take one pound of juicy, lean beef,—say a piece off of the shoulder or the round,—and mince it up with a sharp knife on a board or a mincing-block. Then put it with its juice into an earthen vessel containing a pint of tepid water, and let it stand for two hours. Strain off the liquid through a clean cloth, squeezing well the meat, and add a little salt. Place the whole of the juice thus obtained over the fire, but remove it as soon as it has become browned. Never let it boil; otherwise most of the nutritious matter of the beef will be thrown down as a sediment. Prepared in this way, the whole nourishment of the beef is retained in the tea, making a pleasant and palatable food. A little pepper or allspice may be added if preferred.

Mutton-tea may be prepared in the same way. It makes an agreeable change when the patient has become tired of beef-tea.

Raw Beef for Children.—Take half a pound of juicy beef, free from any fat; mince it up very finely; then rub it up into a smooth pulp either in a mortar or with an ordinary potato-masher. Spread a little out upon a plate and sprinkle over it some salt, or some sugar, if the child prefers it. Give it with a teaspoon or upon a buttered slice of stale bread. It makes an excellent food for children with dysentery.

At a meeting of the Obstetrical Society of Philadelphia, held April 3, 1873, the undersigned committee was appointed "to consider the Causes and the Prevention of Infant Mortality during the Summer Months."

The foregoing rules, drawn up by this Committee, were revised and adopted by the Society at a meeting held May 1, 1873, and ordered to be published.

DR. WILLIAM GOODELL, *Chairman*,
DR. J. FORSYTH MEIGS,
DR. JOHN L. LUDLOW,
DR. ALBERT H. SMITH,
DR. JOHN S. PARRY,
DR. WILLIAM F. JENKS.

THE London *Lancet* says, editorially, "We have received a most touching proof of the great progress and the wide diffusion of sanitary science. It is in the shape of the circular of a candidate for the office of inspector of nuisances; and we cannot find in our hearts to withhold any portion of it from our readers. It runs thus:—

"SIR,—Being a candidate for the office of inspector of nuisances, I beg to make a few remarks. Having for many years made the science of hygiene, or the guide to health, my especial study for the human family, I have been trying to carry it out; for in my rounds, which comprise a district of about twenty miles in * * * * as a hair-cutter, etc., among gentlemen's and farmers' families, I make it my duty to explain, whenever I have an opportunity, the importance of sanitary improvements, especially among the dwellings of poor people in crowded and ill-ventilated houses—almost forming districts of pollution—from which places mostly emanate miasma and effluvia producing blood-poison, which flies like fire, and ends in fever, smallpox, and other diseases, which is taken up and dropped by dews in healthy places, thereby producing endemic which sometimes ends in epidemic, almost as a plague, which was the case last year, puzzling even the faculty itself to know how it originated. I think those beautiful subjects ought to be the main lever or work of a sanitary officer's duty; and, if elected, I should do my utmost to rid places of the filth, and try more particularly to prevent surface-drainage (and this is most important) in places where many poor people have to get their drinking-water; I believe from this source emanate most of our fever cases.

"At the election I should be most happy to be severely catechised as to my proficiency as a candidate.

"Trusting to your vote, I beg to remain, sir, yours obediently,

— — —, Hair-dresser."

"We need hardly say that we wish the gentleman every possible success in his candidature, and hope that his meritorious efforts for the good of his neighbors may for the future be continued with the advantages of official position and authority. Our only fear for him is that the officials at Gwydyr House may dread lest he should know too much, and may refuse to sanction his appointment out of consideration for the feelings of the gentlemen who might be called upon to 'inspect' his work. It is bad enough to have to deal with doctors who understand what they are about; but to have inspectors of nuisances of the same character would surely be more than Poor-law flesh and blood could bear."

CULTIVATION OF CINCHONA IN INDIA.—From the annual report made by Mr. George King, M.B., Superintendent of Botanical Gardens, and in charge of cinchona cultivation in Bengal, we glean the following particulars regarding the year's operations. During that period 166,285 plants of *cinchona succirubra*, and 44,500 of *cinchona calisaya*, have been added to the permanent plantation. Propagation has been carried on vigorously, the seed and nursery beds containing at least 600,000 young plants of the former and 147,500 of the latter species. The plantations of young trees have been thoroughly inspected, and weakly trees cut out. The bark from these, together with that obtained from the prunings of other trees, amounted to 116,000 pounds (equal to about 39,000 pounds of dry bark). Of this some 7000 pounds were sold at auction in London, realizing an average of one shilling and fivepence per pound. The total number of plants, cuttings, and seedlings at present growing on the plantation is 2,394,799. Of these two millions belong to *C. succirubra*, and the remainder to five other species. Regarding the cultivation of cinchona in India, Dr. King thinks its production as a crop cannot fairly be considered, as yet, beyond the condition of an experiment. "It has, indeed, been demonstrated that cinchona-trees can be grown successfully up to the age of about ten years, and that their bark is quite as rich in alkaloids as that obtained from the South American forests; but whether they will reach maturity remains to be seen. It is still to be settled how the bark crop can most advantageously be taken, and the respective merits of the systems of mossing as invented and practised by Mr. McIvor, of systematic coppicing, and of working forest-fashion by selection and thinning, cannot be determined without much additional experience. Connected with the commercial aspect of the matter, there are, as unsettled problems, the probable extent to which the price of the drug will be affected by the introduction into the European market of the large quantities of bark which must soon begin to be turned out by the various Indian and colonial plantations that have been established, the amount by which the demand for preparations of cinchona will be increased by the fall in their price which is almost certain to take place, and, finally, the advantages or disadvantages of the manufacture of an amorphous preparation at the plantation as opposed to the complete separation of alkaloid in a pure form, or to the more primitive plan of exporting all the bark to England and of taking prepared alkaloids in exchange as part payment."—*Canadian Pharm. Jour.*

MONTEVIDEO is again being decimated by yellow fever. Unadmonished by bitter experience or by the recent disastrous epidemic in Buenos Ayres, the inhabitants still allow cesspools to honeycomb the sites of their houses. They have fled in great numbers.

THE Sultan of Turkey retains the exclusive services of a lady physician—a New Hampshire lady, who graduated in Philadelphia—to attend the females and children of his household.

KILLED AT HIS POST.—Mr. Lutwidge, the Commissioner in Lunacy who, while visiting an asylum near Salisbury, was stabbed in the right temple by one of the patients, died on the evening of the 28th ult., a few minutes before the arrival from London of Sir James Paget. The fatal blow was inflicted with a long nail, and was followed by a paralytic affection, from which he never rallied.

WEEKLY RETURN OF DEATHS AND INTERMENTS IN PHILADELPHIA FOR THE WEEK ENDING SATURDAY, JUNE 14, 1873.

DISEASES.	Adults.	Minors.	DISEASES.	Adults.	Minors.
Abscess.....	1	...	Fatty Degene'n of Heart	1	...
Anæmia.....	1	...	Fever, Scarlet.....	...	6
Apoplexy.....	4	...	" Typhoid.....	6	2
Asphyxia.....	1	1	Fracture of the Spine...	1	...
Burns and Scalds.....	2	2	Hooping-Cough.....	...	1
Cancer.....	1	...	Inanition.....	...	4
" of Jaw.....	...	1	Inflammation of Bladder.	1	...
" Liver.....	1	...	" Brain.....	...	5
" Stomach.....	2	...	" Bronchi.....	1	4
Casualties.....	1	2	" Lungs.....	1	4
Cerebro-Spinal Meningitis	1	4	" Peritoneum.....	1	1
Cholera Infantum.....	1	7	" Stomach & Bowels	3	4
Cirrhosis of Liver.....	2	...	Intemperance.....	1	...
Congestion of Bowels.....	1	...	Jaundice.....	...	1
" Brain.....	1	2	Mania a potu.....	1	...
Consumption of Lungs.....	31	10	Malformation.....	...	1
Convulsions.....	1	10	Marasmus.....	...	12
Croup.....	...	2	Measles.....	...	1
Cyanosis.....	...	1	Neuralgia of the Heart...	2	...
Debility.....	13	3	Old Age.....	5	...
Diarrhoea.....	...	1	Paralysis.....	5	...
Diphtheria.....	...	2	Poisoning.....	...	1
Disease of Brain.....	2	...	Pyæmia.....	1	...
" Heart.....	6	...	Smallpox.....	1	...
" Kidneys.....	2	...	Softening of Brain.....	1	...
" Liver.....	1	...	Still-Born.....	...	21
Dropsy.....	3	1	Suicide.....	2	...
" of Brain.....	...	2	Syphilis.....	...	1
" Chest.....	2	...	Teething.....	...	1
" Heart.....	...	1	Tetanus.....	1	1
" Lungs.....	...	1	Tumors.....	...	1
Drowned.....	1	1	Ulceration of Throat.....	...	1
Dysentery.....	1	1	Unknown.....	...	1
Effusion on Brain.....	1	1	Wounds, Gunshot.....	1	...
Empyæma of Lungs.....	1	...			
Epilepsy.....	1	...			
Erysipelas.....	...	2			
TOTALS				120	122

METEOROLOGICAL OBSERVATIONS TAKEN AT THE SIGNAL OFFICE, PHILADELPHIA, DURING THE WEEK ENDING SATURDAY, JUNE 14, 1873.

Month and Day.	Barometer. Daily Mean	Thermom. Daily Mean	State of Weather.	Rain. In.
JUNE.				
Sunday.....8th	30.24	63	Clear.
Monday.....9th	30.10	68	Clear.
Tuesday.....10th	29.96	72	Fair, Cloudy.
Wednesday.....11th	29.98	74	Cloudy.	.01
Thursday.....12th	30.12	70	Fair.	.08
Friday.....13th	30.15	64	Fair.
Saturday.....14th	29.98	63	Cloudy, Fair.
Means	30.07	68		.03

The surface of the cistern of Barometer is located 71.92 feet above the mean level of the sea.

Barometer corrected for temperature, elevation above sea, and instrumental error.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM JUNE 10, 1873, TO JUNE 16, 1873, INCLUSIVE.

MEACHAM, FRANK, ASSISTANT-SURGEON.—Granted leave of absence for thirty days. S. O. 118, A. G. O., June 12, 1873.